

**CLAIMS**

1. A method of maintaining two-way asynchronous communication between a client and a web server using a single HTTP transaction, comprising:

5 communicating an HTTP request from a client to a web server, wherein the HTTP request is configured to initialize a CGI that operates within or in conjunction with the web server; and

executing operations associated with the CGI, wherein the operations are configured to perform the two-way asynchronous communication with the client  
10 until terminated by the client or the CGI.

2. The method of claim 1, wherein executing operations includes receiving and processing data from the client.

15 3. The method of claim 2, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.

4. The method of claim 1, wherein executing operations includes creating and communicating data from the CGI to the client.

20 5. The method of claim 4, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.

6. The method of claim 1, wherein the client includes client-side  
25 logic configured to perform the two-way asynchronous communication with the CGI.

7. The method of claim 6, wherein the client-side logic is pre-installed on the client.

8. The method of claim 6, wherein the client-side logic is dynamically delivered to the client from the web server.

9. A system for maintaining two-way asynchronous communication between a client and a web server using a single HTTP transaction, comprising:

means for communicating an HTTP request from a client to a web server, wherein the HTTP request is configured to initialize a CGI that operates within or in conjunction with the web server; and

10 means for executing operations associated with the CGI, wherein the operations are configured to perform the two-way asynchronous communication with the client until terminated by the client or the CGI.

10. The method of claim 9, wherein the executing means includes means for receiving and processing data from the client.

11. The method of claim 10, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.

12. The method of claim 9, wherein the executing means includes means for creating and communicating data from the CGI to the client.

13. The method of claim 12, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.

14. The method of claim 9, wherein the communicating means includes client-side logic configured to perform the two-way asynchronous communication with the CGI.

15. The method of claim 14, wherein the client-side logic is pre-installed on the client.

16. The method of claim 14, wherein the client-side logic is  
5 dynamically delivered to the client from the web server.

17. The method of claim 16, wherein the client-side logic is delivered in the form of a Java<sup>TM</sup> applet.

10 18. The method of claim 16, wherein the client-side logic is delivered in the form of Macromedia Shockwave movie.

19. The method of claim 9, wherein the CGI is a servlet.

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